

AMENDMENTS TO THE SPECIFICATION

Page 1, immediately following the title, insert:

Cross Reference To Related Application

Please insert the paragraph beginning on page 1, line 1 with the following amended paragraph:

The present application claims priority under 35 USC. § 119 to WO 2004/113245 A1 (PCT/CH/2004/00377), the contents of which are hereby incorporated by reference.

Please replace the paragraph beginning on page 1, line 1:

~~The invention relates to a~~ A granulate and a bulk material with or consisting of such a granulate are disclosed. The granulate is produced by sintering crushed blow-molded glass into a sintered body and then breaking the body into fragments.

Please replace the paragraph beginning on page 1, line 4:

~~The invention also relates to a~~ A bulk material with broken foam glass fragments, in whose glass starting material (e.g., scrap glass), toxins, in particular antimony and/or arsenic, could be fixed is also disclosed.

Please replace the paragraph beginning on page 1, line 7

~~The invention relates in particular to a~~ A bulk material for water purification is disclosed. The bulk material for the water purification contains a granulate that includes (e.g., consists of) fragments of a sintered body that is sintered from crushed

blow-molded glass, in particular a broken granulate of a foam glass, or the bulk material consists completely of such a granulate.

Please replace the paragraph beginning on page 1, line 11

In this document, sintered body is defined as a heat-sintered body that includes, (e.g., consists of) blow-molded glass fragments. In this body, the original parts remain essentially stationary during sintering. After the sintering, the fragments are connected to one another at least via bridges. Between the sintered fragments of the blow-molded glass in this case, there are cavities that, depending on the design of the sintering, are designed in an interconnecting, partially interconnecting or closed-cell manner. Foam glass is defined as a special form of such a sintered body.

Please replace the paragraph beginning on page 10, line 4:

~~The object of the invention is to propose a~~ A granulate is disclosed that can be used in many ways and a bulk material that consists of or is with this granulate. The granulate is to be non-polluting, advantageous in production, and producible from waste products. It is to be possible to produce the granulate in a quality with high compressive strength.

Please replace the paragraph beginning on page 10, line 8:

~~This object is achieved by the subject of claim 1. The~~ An exemplary granulate that includes (e.g., consists of) fragments of a sintered body that is sintered from crushed blow-molded glass with a number of inclusions of at least one active substance on

the broken surfaces of the granulate can be produced with conventional processes and in an extremely pressure resistant quality. The active substance is embedded as a grain in the sintered body. Owing to the active substance, which can occur in interaction with the toxin upon contact with toxins that are suspended or dissolved in particular in water, the product is not only non-polluting but can even be used for purification of the environment. As active substance, primarily the following are suitable: iron powder, but also other metals, and/or additional substances that are commonly used in waste purification, such as activated carbon and zeolites.

Please replace the paragraph beginning on page 12, line 18:

~~This object is achieved in that~~ In a bulk material with broken foam glass fragments, the foam glass fragments can primarily consist of the contents of conventional foam glasses, namely blow-molded glass and foaming agents, but have a content of metallic iron. The iron particles are present as a variety of inclusions of the surface of the broken-up cells. This metallic iron is embedded in the form of preferably homogeneously distributed, extremely fine inclusions in the foam glass matrix.

Please replace the paragraph beginning on page 16, line 15:

A powder mixture is disclosed for the production of environmentally compatible foam glass, which has a powder mixture in addition to the primary component of glass powder from blow-molded glass, in particular scrap glass powder, and a forming agent according to the invention that forms gas under heat action, and also metallic iron powder. In this case, this powder mixture is essentially free of sodium hydroxide.

Please replace the paragraph beginning on page 17, line 2:

The invention also relates to a process for the production of foam glass, in which glass powder that includes, (e.g., that consists of) blow-molded glass, especially scrap glass, and a fine-grained foaming agent that forms gas under the action of heat, are mixed homogeneously with one another. The thus resulting powder mixture is – as in the conventional foam glass production, applied in one layer on a base, and this layer is heated in a furnace. The thus sintered and foamed glass is then cooled and broken into foam glass fragments.

Please replace the paragraph beginning on page 17, line 7:

~~According to the invention, the~~ An exemplary process is can be distinguished from conventional processes in that in the production of the powder mixture, additional iron powder is homogeneously mixed with the glass powder and the foaming agent. This allows in particular the foam glass production under reductive or strongly reductive conditions. The addition of water is avoided. The powder mixture is therefore preferably mixed dry and applied in a unwetted state to the base and foamed as a loose feedstock.

Please replace the paragraph beginning on page 17, line 19:

The An advantage of the bulk material according to exemplary embodiment of the invention is that its use in environmentally-sensitive areas is harmless. This harmlessness is itself provided if the glass starting substance that is used is scrap glass or for other reasons contains more than 1mg/kg or even more than 5 mg/kg of

antimony and/or arsenic. This has the advantage that the starting product does not need to be examined for its ability to contain toxins. Also, no identification and no sorting-out of toxin-containing scap glass is necessary.

Please replace the paragraph beginning on page 18, line 1:

~~The invention also relates to the use of the A~~ bulk material according to the invention can be used as an additive for the production of an inorganically-or organically-bonded construction material or as loose bulk material. These uses are also possible in an environmentally-sensitvie area, especially in contact with ground water, surface water or drinking water, e.g., in hydraulic engineering, in underground structures or in building c

Please replace the paragraph beginning on page 18, line 13:

The object is achieved, for example, by a bulk material for water purification, which includes (e.g., consists of) a broken granulate of a sintered body produced from crushed blow-molded glass, in particular from a broken granulate of a foam glass, or has such a granulate. This granulate is distinguished by an active substance that is present in the broken surface and embedded as grain in the glass matrix. The active substance is substance that interacts with selected toxins contained in particular in water. This interaction is in general an adsorption or a chemical reaction.

Please replace the paragraph beginning on page 25, line 22:

The bulk material for water purification according to an exemplary embodiments of the invention can be used for waste water purification in a multi-stage sewage treatment plant, in particular in the last stage. In modern plants, this stage consists of a sand filter that periodically reverses its flow or is continuously regenerated in a circuit. The bulk material for water purification according to the invention replaces this pure mechanical filter medium as an active filter medium. Owing to its iron portion, it binds still present phosphate radicals and heavy metals. The large surface area, the high mechanical strength and the low specific weight impart to the bulk material (foam glass or unfoamed sintered glass) a specific weight impart to the bulk material (foam glass or unfoamed sintered glass) a specific suitability for use in such a filter stage. A portion of the bulk material for the water purification can be drawn off continuously and can be replaced by fresh or regenerated bulk material. The bulk material that is drawn off is regenerated chemically or preferably thermally.

Please replace the paragraph beginning on page 26, line 10:

The bulk material for water purification according to an exemplary embodiment of the invention can also be used in drinking water renovation to bind toxins such as arsenic, antimony, mercury, salts, chromate, phosphate, nitrate, and organochlorine compounds (such as CKW, pesticides). Owing to the presence of Fe^0 , some endocrine toxins and organic complexing agents are bonded with such a filter or destroyed.

Please replace the paragraph beginning on page 27, line 12:

Fig. 6 shows a diagram of the development of the copper concentration in a solution whereby plots are compared between the use of an expanded glass and the use of pellets that are only sontered according to an exemplary embodiment of the invention.

Please replace the paragraph beginning on page 29, line 1:

The results are depicted in Figure 1. The product according to an exemplary embodiment of 3% iron has an antimony concentration in the eluate that is reduced by 80% relative to the zero sample. The arsenic concentration was even reduced by 90%.

Please add the paragraph beginning on page 35, line 9:

It will be appreciated by those skilled in the art that the present invention can be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The presently disclosed embodiments are therefore considered in all respects to be illustrative and not restricted. The scope of the invention is indicated by the appended claims rather than the foregoing description and all changes that come with the meaning and range and equivalence thereof are intended to be embraced therein.